I.   Amendments to the Claims:

This listing of the claims replaces all prior versions and listings of claims in the application:

A.   Listing of Claims:

Claims 1-22 (Cancelled)

23.   (Previously Presented) An engineering system that employs a solid shape describing method for describing a solid model existing in a three-dimensional space with use of a bit map, said system comprising:

a function for defining a plurality of different coordinate systems used for said solid model;

a function for defining that an area occupied by one of said plurality of different coordinate systems overlaps with a part or whole of an area occupied by another coordinate system; and

a display unit for displaying a solid shape by describing its solid shape data with use of said plurality of different coordinate systems.

Claims 24-29 (cancelled)

30.   (New) An engineering system for describing solid models existing in a three-dimensional space with use of a bit map having a cell comprising:

a grid that divides said three-dimensional space into a plurality of cells wherein each of said cells includes information that denotes whether its center exists inside or outside the subject solid shape,

a solid shape describing apparatus provided with a memory for storing programs;

a data storage unit;

a display unit; and

a plurality of functions provided by the programs, said functions comprising:

a function for receiving a definition of a plurality of different coordinate systems to any one of said solid models;

a function for receiving a definition that an area occupied by one of said plurality of different coordinate systems overlaps with a part or whole of an area occupied by another coordinate system; and

a function for converting said solid model to its solid shape data with use of said defined plurality of different coordinate systems and displaying said solid model according to said solid shape data on the display unit.

31.   (New) A method for describing solid models existing in a three-dimensional space with use of a bit map having a cell comprising:

defining a grid that divides said three-dimensional space into a plurality of cells wherein each of said cells includes information that denotes whether its center exists inside or outside the subject solid shape;

receiving a definition of a plurality of different coordinate systems to any one of said solid models;

receiving a definition of a plurality of different coordinate systems to any one of said solid models;

receiving a definition that an area occupied by one of said plurality of different coordinate systems overlaps with a part or whole of an area occupied by another coordinate system; and

converting said solid model to its solid shape data with use of said defined plurality of different coordinate systems and displaying said solid model according to said solid shape data on the display unit.